

chain nodes :

7 8 9

ring nodes :

1 2 3 4 5 6 10 11 12 13 14 15

chain bonds :

5-9 6-7 7-8 9-10

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

exact/norm bonds :

6-7

exact bonds :

5-9 7-8 9-10

normalized bonds :

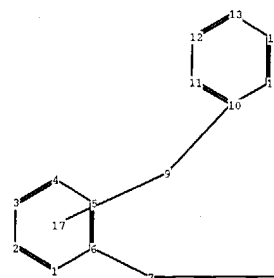
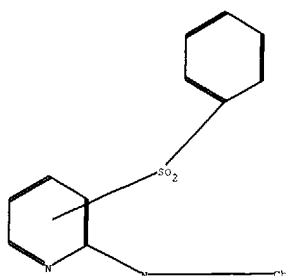
1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

isolated ring systems :

containing 1 : 10 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom



chain nodes :

7 8 9

ring nodes :

1 2 3 4 5 6 10 11 12 13 14 15

chain bonds :

6-7 7-8 9-10

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

exact/norm bonds :

6-7

exact bonds :

7-8 9-10

normalized bonds :

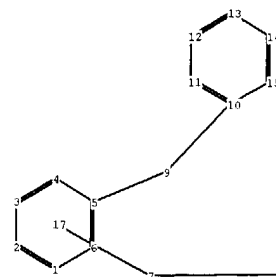
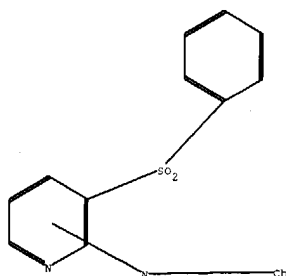
1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

isolated ring systems :

containing 1 : 10 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 17:CLASS



chain nodes :

7 8 9

ring nodes :

1 2 3 4 5 6 10 11 12 13 14 15

chain bonds :

5-9 7-8 9-10

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

exact bonds :

5-9 7-8 9-10

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

isolated ring systems :

containing 1 : 10 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 17:CLASS

* * * * * Welcome to STN International * * * * *

| | | |
|---------------------|---------|---|
| <u>NEWS 1</u> | | Web Page URLs for STN Seminar Schedule - N. America |
| <u>NEWS 2</u> | | "Ask CAS" for self-help around the clock |
| <u>NEWS 3</u> | May 12 | EXTEND option available in structure searching |
| <u>NEWS 4</u> | May 12 | Polymer links for the POLYLINK command completed in REGISTRY |
| <u>NEWS 5</u> | May 27 | New UPM (Update Code Maximum) field for more efficient patent SDIs in CAPlus |
| <u>NEWS 6</u> | May 27 | CAPlus super roles and document types searchable in REGISTRY |
| <u>NEWS 7</u> | Jun 28 | Additional enzyme-catalyzed reactions added to CASREACT |
| <u>NEWS 8</u> | Jun 28 | ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG, and WATER from CSA now available on STN(R) |
| <u>NEWS 9</u> | Jul 12 | BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS |
| <u>NEWS 10</u> | Jul 30 | BEILSTEIN on STN workshop to be held August 24 in conjunction with the 228th ACS National Meeting |
| <u>NEWS 11</u> | AUG 02 | IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields |
| <u>NEWS 12</u> | AUG 02 | CAPlus and CA patent records enhanced with European and Japan Patent Office Classifications |
| <u>NEWS 13</u> | AUG 02 | STN User Update to be held August 22 in conjunction with the 228th ACS National Meeting |
| <u>NEWS 14</u> | AUG 02 | The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available |
| <u>NEWS 15</u> | AUG 04 | Pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! will change September 1, 2004 |
| <u>NEWS 16</u> | AUG 27 | BIOCOMMERCE: Changes and enhancements to content coverage |
| <u>NEWS 17</u> | AUG 27 | BIOTECHABS/BIOTECHDS: Two new display fields added for legal status data from INPADOC |
| <u>NEWS 18</u> | SEP 01 | INPADOC: New family current-awareness alert (SDI) available |
| <u>NEWS 19</u> | SEP 01 | New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! |
| <u>NEWS 20</u> | SEP 01 | New display format, HITSTR, available in WPIDS/WPINDEX/WPIX |
| <u>NEWS EXPRESS</u> | JULY 30 | CURRENT WINDOWS VERSION IS V7.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004 |
| <u>NEWS HOURS</u> | | STN Operating Hours Plus Help Desk Availability |
| <u>NEWS INTER</u> | | General Internet Information |
| <u>NEWS LOGIN</u> | | Welcome Banner and News Items |
| <u>NEWS PHONE</u> | | Direct Dial and Telecommunication Network Access to STN |
| <u>NEWS WWW</u> | | CAS World Wide Web Site (general information) |

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FILE 'HOME' ENTERED AT 19:22:32 ON 01 SEP 2004

=> file req

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.21 | 0.21 |

FULL ESTIMATED COST

h

eb c

g cg b

cg

eb

FILE 'REGISTRY' ENTERED AT 19:22:38 ON 01 SEP 2004
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STRUCTURE FILE UPDATES: 31 AUG 2004 HIGHEST RN 736193-62-7
 DICTIONARY FILE UPDATES: 31 AUG 2004 HIGHEST RN 736193-62-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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 information enter HELP PROP at an arrow prompt in the file or refer
 to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

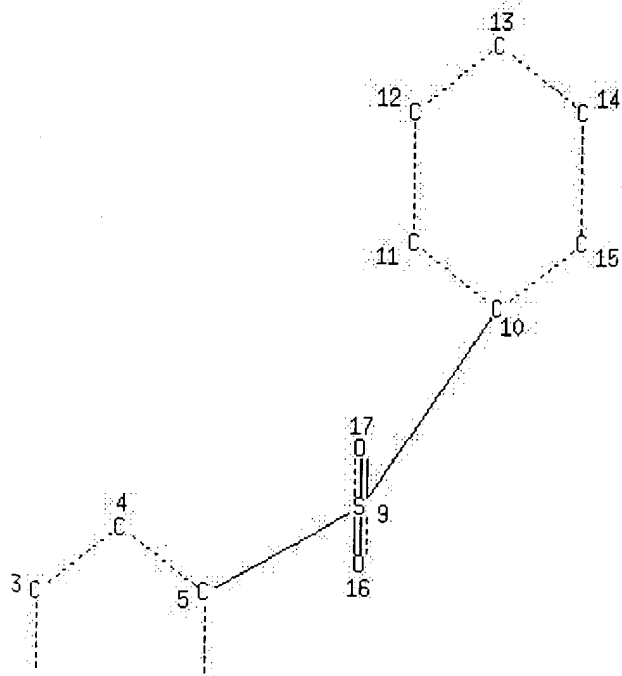
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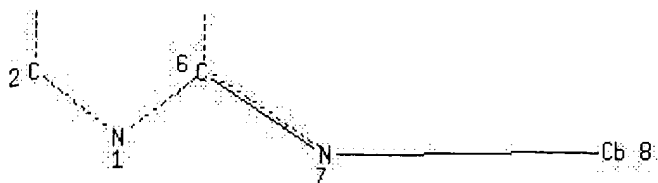
=> d 11

L1 HAS NO ANSWERS

L1 STR



Page 1-A



Page 2-A

NODE ATTRIBUTES:

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| NSPEC | IS R | AT | 2 |
| NSPEC | IS R | AT | 3 |
| NSPEC | IS R | AT | 4 |
| NSPEC | IS R | AT | 5 |
| NSPEC | IS R | AT | 6 |
| NSPEC | IS C | AT | 7 |
| NSPEC | IS C | AT | 8 |
| NSPEC | IS C | AT | 9 |
| NSPEC | IS R | AT | 10 |
| NSPEC | IS R | AT | 11 |
| NSPEC | IS R | AT | 12 |
| NSPEC | IS R | AT | 13 |
| NSPEC | IS R | AT | 14 |
| NSPEC | IS R | AT | 15 |
| NSPEC | IS C | AT | 16 |
| NSPEC | IS C | AT | 17 |

DEFAULT MLEVEL IS ATOM

MLEVEL IS CLASS AT 7 9 16 17

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

=> s 11

SAMPLE SEARCH INITIATED 19:24:34 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 61 TO ITERATE

100.0% PROCESSED 61 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 752 TO 1688

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 19:24:37 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 944 TO ITERATE

100.0% PROCESSED 944 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L1

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

156.26

156.47

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FILE COVERS 1907 - 1 Sep 2004 VOL 141 ISS 10

FILE LAST UPDATED: 31 Aug 2004 (20040831/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4

0 L3

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

2.36

158.83

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DICTIONARY FILE UPDATES: 31 AUG 2004 HIGHEST RN 736193-62-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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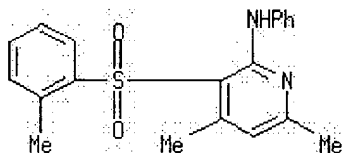
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=> d 1.3

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 338956-82-4 REGISTRY
 CN 2-Pyridinamine, 4,6-dimethyl-3-[(2-methylphenyl)sulfonyl]-N-phenyl- (9CI)
 (CA INDEX NAME)
 FS 3D CONCORD
 MF C20 H20 N2 O2 S
 SR Chemical Library
 LC STN Files: CHEMCATS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

=> file hcaplus

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 2.19 | 161.02 |

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=> d his

(FILE 'HOME' ENTERED AT 19:22:32 ON 01 SEP 2004)

FILE 'REGISTRY' ENTERED AT 19:22:38 ON 01 SEP 2004

L1 STRUCTURE UPLOADED
 L2 0 S L1
 L3 1 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 19:24:40 ON 01 SEP 2004
L4 0 S L3

FILE 'REGISTRY' ENTERED AT 19:24:46 ON 01 SEP 2004

FILE 'HCAPLUS' ENTERED AT 19:24:53 ON 01 SEP 2004

=> s l3

L5 0 L3

=> file reg

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 2.36 | 163.38 |

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 19:25:02 ON 01 SEP 2004
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DICTIONARY FILE UPDATES: 31 AUG 2004 HIGHEST RN 736193-62-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

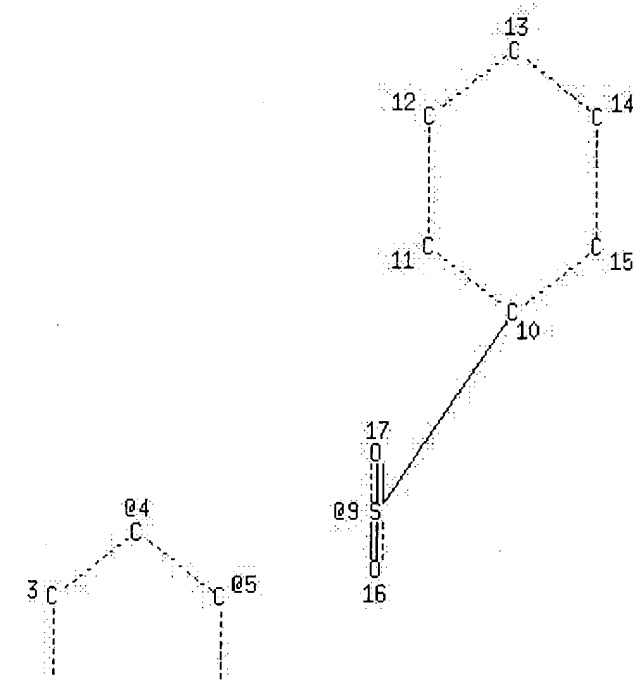
=>

L6 STRUCTURE UPLOADED

=> d l6

L6 HAS NO ANSWERS

L6 STR



Page 1-A



Page 2-A

VPA 9-2/4/5 S

NODE ATTRIBUTES:

| | | | |
|-------|------|----|----|
| NSPEC | IS R | AT | 1 |
| NSPEC | IS R | AT | 2 |
| NSPEC | IS R | AT | 3 |
| NSPEC | IS R | AT | 4 |
| NSPEC | IS R | AT | 5 |
| NSPEC | IS R | AT | 6 |
| NSPEC | IS C | AT | 7 |
| NSPEC | IS C | AT | 8 |
| NSPEC | IS C | AT | 9 |
| NSPEC | IS R | AT | 10 |
| NSPEC | IS R | AT | 11 |
| NSPEC | IS R | AT | 12 |
| NSPEC | IS R | AT | 13 |
| NSPEC | IS R | AT | 14 |
| NSPEC | IS R | AT | 15 |
| NSPEC | IS C | AT | 16 |
| NSPEC | IS C | AT | 17 |

DEFAULT MLEVEL IS ATOM

MLEVEL IS CLASS AT 7 9 16 17

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

=> s 15

SAMPLE SEARCH INITIATED 19:25:53 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2031 TO ITERATE

49.2% PROCESSED 1000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 37917 TO 43323
PROJECTED ANSWERS: 0 TO 0

L7 0 SEA SSS SAM L6

=> s 16 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 19:25:57 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 40720 TO ITERATE

100.0% PROCESSED 40720 ITERATIONS 5 ANSWERS
SEARCH TIME: 00.00.01

L8 5 SEA SSS FUL L6

=> file hcaplus

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 155.84 | 319.22 |

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=> s 18

L9 4 L8

=> s 19 and hartz, r?/au

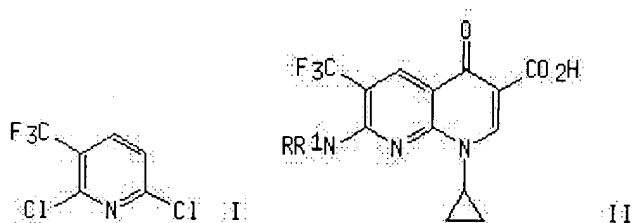
37 HARTZ, R?/AU
 L10 0 L9 AND HARTZ, R?/AU
 => s 19 and arvanitis, a?/au
 49 ARVANITIS, A?/AU
 L11 0 L9 AND ARVANITIS, A?/AU

=> d 19, ibib abs fhitstr, 1-4

L9 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text Citings
 Text References

ACCESSION NUMBER: 1991:142933 HCAPLUS
 DOCUMENT NUMBER: 114:142933
 TITLE: Synthesis of 7-amino-1,4-dihydro-4-oxo-6-(trifluoromethyl)-1,8-naphthyridines. The use of methylidenemalonate as an activating group and a sulfur assisted cyclization
 AUTHOR(S): Bridge, A. J.; Sanchez, J. P.
 CORPORATE SOURCE: Parke-Davis Pharm. Res. Div., Warner-Lambert Co., Ann Arbor, MI, 48105, USA
 SOURCE: Journal of Heterocyclic Chemistry (1990), 27(6), 1527-36
 CODEN: JHTCAD; ISSN: 0022-152X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 114:142933
 GI



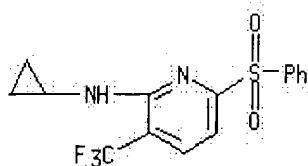
AB Dichloro(trifluoromethyl)pyridine (I) was used to develop a 6-step prepn. of enoxacin analogs, aminooxo(trifluoromethyl)naphthyridines [II, RR1 = (CH₂)₂NH(CH₂)₂, (CH₂)₂CH(CH₂NH₂)CH₂, (CH₂)₂CH(NH₂)CH₂]. The CF₃ group deactivated the pyridine ring towards both nucleophiles and electrophiles. A new reagent for pyridone annulation, the (aminomethylidene)malonate anion, is described, along with several strategies to manipulate the electron d. of substituted pyridines.

IT **132844-51-0P**

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 132844-51-0 HCAPLUS

CN 2-Pyridinamine, N-cyclopropyl-6-(phenylsulfonyl)-3-(trifluoromethyl)-
 (9CI) (CA INDEX NAME)



L9 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN

| | |
|--------------|------------------------|
| Full Text | Chemical References |
|--------------|------------------------|

ACCESSION NUMBER: 1987:477777 HCAPLUS
 DOCUMENT NUMBER: 107:77777
 TITLE: 1,4-Dihydro-4-oxo-1,8-naphthyridines useful as antibacterials
 INVENTOR(S): Todo, Yozo; Yamafuji, Tetsuo; Nagumo, Katsuyuki; Kitayama, Isao; Nagaki, Hideyoshi; Miyajima, Mikako; Konishi, Yoshinori; Narita, Hirokazu; Takano, Shuntaro; Seikawa, Isamu
 PATENT ASSIGNEE(S): Toyama Chemical Co., Ltd., Japan
 SOURCE: Fr. Demande, 146 pp.
 CODEN: FRXXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------|------|----------|------------------------|----------|
| <u>FR 2576305</u> | A1 | 19860725 | <u>FR 1986-871</u> | 19860122 |
| <u>FR 2576305</u> | B1 | 19910419 | | |
| <u>JP 61171469</u> | A2 | 19860802 | <u>JP 1985-9191</u> | 19850123 |
| <u>JP 06029247</u> | B4 | 19940420 | | |
| <u>JP 61189269</u> | A2 | 19860822 | <u>JP 1985-28397</u> | 19850218 |
| <u>JP 06029246</u> | B4 | 19940420 | | |
| <u>JP 61204184</u> | A2 | 19860910 | <u>JP 1985-43644</u> | 19850307 |
| <u>JP 06065670</u> | B4 | 19940824 | | |
| <u>JP 61229879</u> | A2 | 19861014 | <u>JP 1985-69061</u> | 19850403 |
| <u>JP 06065671</u> | B4 | 19940824 | | |
| <u>JP 61257985</u> | A2 | 19861115 | <u>JP 1985-97065</u> | 19850508 |
| <u>JP 06062619</u> | B4 | 19940817 | | |
| <u>JP 61289088</u> | A2 | 19861219 | <u>JP 1985-129323</u> | 19850614 |
| <u>JP 06065672</u> | B4 | 19940824 | | |
| <u>AT 8600072</u> | A | 19901115 | <u>AT 1986-72</u> | 19860114 |
| <u>AT 392789</u> | B | 19910610 | | |
| <u>GB 2170804</u> | A1 | 19860813 | <u>GB 1986-1045</u> | 19860116 |
| <u>GB 2170804</u> | B2 | 19890920 | | |
| <u>US 4704459</u> | A | 19871103 | <u>US 1986-819821</u> | 19860117 |
| <u>FI 8600250</u> | A | 19860724 | <u>FI 1986-250</u> | 19860120 |
| <u>FI 83313</u> | B | 19910315 | | |
| <u>FI 83313</u> | C | 19910625 | | |
| <u>DE 3601517</u> | A1 | 19860821 | <u>DE 1986-3601517</u> | 19860120 |
| <u>DE 3601517</u> | C2 | 19891116 | | |
| <u>DE 3637679</u> | C1 | 19920827 | <u>DE 1986-3637679</u> | 19860120 |
| <u>DE 3641633</u> | C2 | 19971030 | <u>DE 1986-3641633</u> | 19860120 |
| <u>AU 8652543</u> | A1 | 19860731 | <u>AU 1986-52543</u> | 19860121 |
| <u>AU 576657</u> | B2 | 19880901 | | |
| <u>DK 8600322</u> | A | 19860724 | <u>DK 1986-322</u> | 19860122 |
| <u>DK 169570</u> | B1 | 19941205 | | |
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| <u>NO 163227</u> | B | 19900115 | | |

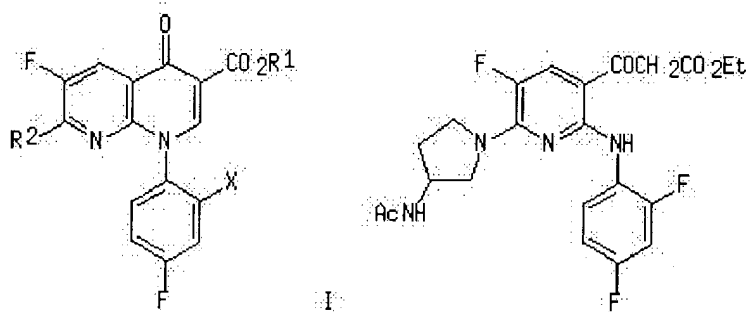
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| <u>NL 8600138</u> | A | 19860818 | <u>NL 1986-138</u> | 19860122 |
| <u>NL 192986</u> | B | 19980302 | | |
| <u>NL 192986</u> | C | 19980703 | | |
| <u>SE 8600274</u> | A | 19860910 | <u>SE 1986-274</u> | 19860122 |
| <u>SE 462164</u> | B | 19900514 | | |
| <u>SE 462164</u> | C | 19900906 | | |
| <u>ZA 8600475</u> | A | 19860924 | <u>ZA 1986-475</u> | 19860122 |
| <u>ES 551134</u> | A1 | 19861216 | <u>ES 1986-551134</u> | 19860122 |
| <u>CN 86100879</u> | A | 19861217 | <u>CN 1986-100879</u> | 19860122 |
| <u>CN 1019012</u> | B | 19921111 | | |
| <u>CH 667456</u> | A | 19881014 | <u>CH 1986-235</u> | 19860122 |
| <u>CH 669378</u> | A | 19890315 | <u>CH 1988-642</u> | 19860122 |
| <u>CH 671957</u> | A | 19891013 | <u>CH 1988-643</u> | 19860122 |
| <u>CN 1054975</u> | A | 19911002 | <u>CN 1991-102757</u> | 19860122 |
| <u>CN 1027067</u> | B | 19941221 | | |
| <u>IL 77688</u> | A1 | 19910131 | <u>IL 1986-77688</u> | 19860123 |
| <u>IL 88468</u> | A1 | 19910131 | <u>IL 1986-88468</u> | 19860123 |
| <u>IL 92401</u> | A1 | 19910131 | <u>IL 1986-92401</u> | 19860123 |
| <u>ES 557077</u> | A1 | 19870816 | <u>ES 1986-557077</u> | 19860919 |
| <u>ES 557078</u> | A1 | 19870816 | <u>ES 1986-557078</u> | 19860919 |
| <u>US 4851535</u> | A | 19890725 | <u>US 1987-67264</u> | 19870629 |
| <u>GB 2204040</u> | A1 | 19881102 | <u>GB 1988-11645</u> | 19880517 |
| <u>GB 2204040</u> | B2 | 19890920 | | |
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| <u>NL 9700011</u> | A | 19980202 | <u>NL 1997-11</u> | 19971106 |
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| JP 1985-97065 | 19850508 |
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| AT 1986-72 | 19860114 |
| GB 1986-1045 | 19860116 |
| DE 1986-3601517 | 19860120 |
| FI 1986-250 | 19860120 |
| CH 1986-235 | 19860122 |
| NL 1986-138 | 19860122 |
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| IL 1986-77688 | 19860123 |
| US 1986-819821 | 19860617 |

OTHER SOURCE(S): CASREACT 107:77777
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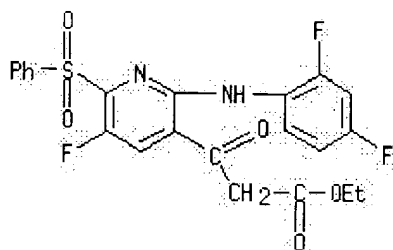
AB The title compds. [I; R1 = H, CO2H-protecting group; R2 = H, OH, N3, (protected) 3-amino-1-pyrrolidinyl, etc.; X = H, F] and their salts, useful as antibacterials, are prepd. Refluxing a mixt. of nicotinoylacetate II in benzene contg. (MeO)2CHNMe2 for 7 h gave 84.2% I (R1 = Et, R2 = 3-acetamido-1-pyrrolidinyl, X = F). The min. inhibitory concns. of I.HCl (R1 = H; R2 = 3-amino-1-pyrrolidinyl; X = F) against a variety of common bacteria ranged <0.02-0.2 µg/mL. I in general may be administered in the form of tablets, capsules, powders, syrups, etc.

IT **105152-64-5P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for antibacterial)

RN **105152-64-5** HCAPLUS

CN 3-Pyridinepropanoic acid, 2-[(2,4-difluorophenyl)amino]-5-fluoro-β-oxo-6-(phenylsulfonyl)-, ethyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN

Full
Text Citations
References

ACCESSION NUMBER: 1986:608850 HCAPLUS
DOCUMENT NUMBER: 105:208850
TITLE: 1-(Aryl-substituted)-1,4-dihydro-6-fluoro-4-oxonaphthyridines and intermediates for their preparation

PATENT ASSIGNEE(S): Toyama Chemical Co., Ltd. , Japan
 SOURCE: Belg., 152 pp.
 CODEN: BEXXAL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

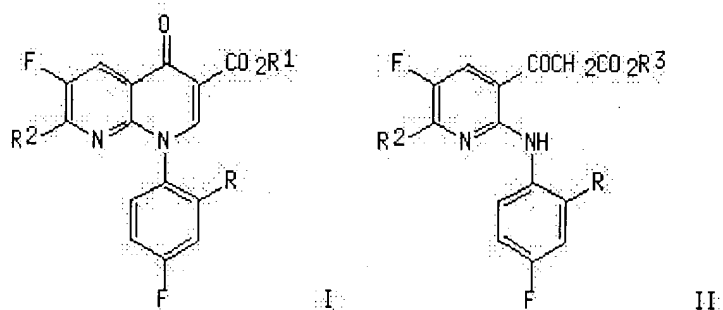
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| BE 904086 | A1 | 19860722 | BE 1986-216165 | 19860122 |
| JP 61171469 | A2 | 19860802 | JP 1985-9191 | 19850123 |
| JP 06029247 | B4 | 19940420 | | |
| JP 61189269 | A2 | 19860822 | JP 1985-28397 | 19850218 |
| JP 06029246 | B4 | 19940420 | | |
| JP 61204184 | A2 | 19860910 | JP 1985-43644 | 19850307 |
| JP 06065670 | B4 | 19940824 | | |
| JP 61257985 | A2 | 19861115 | JP 1985-97065 | 19850508 |
| JP 06062619 | B4 | 19940817 | | |
| DE 3641633 | C2 | 19971030 | DE 1986-3641633 | 19860120 |
| AU 8652543 | A1 | 19860731 | AU 1986-52543 | 19860121 |
| AU 576657 | B2 | 19880901 | | |
| ZA 8600475 | A | 19860924 | ZA 1986-475 | 19860122 |
| CN 86100879 | A | 19861217 | CN 1986-100879 | 19860122 |
| CN 1019012 | B | 19921111 | | |
| CH 669378 | A | 19890315 | CH 1988-642 | 19860122 |
| CH 671957 | A | 19891013 | CH 1988-643 | 19860122 |
| IL 88468 | A1 | 19910131 | IL 1986-88468 | 19860123 |
| IL 92401 | A1 | 19910131 | IL 1986-92401 | 19860123 |
| US 4851535 | A | 19890725 | US 1987-67264 | 19870629 |
| GB 2204040 | A1 | 19881102 | GB 1988-11645 | 19880517 |
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| AT 394193 | B | 19920210 | | |
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| NO 178574 | C | 19960424 | | |
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| NL 193540 | B | 19990901 | | |
| NL 193540 | C | 20000104 | | |

PRIORITY APPLN. INFO.:

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| <u>GB 1986-1045</u> | 19860116 |
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| <u>NO 1986-226</u> | 19860122 |
| <u>IL 1986-77688</u> | 19860123 |
| <u>US 1986-819821</u> | 19860617 |

OTHER SOURCE(S): CASREACT 105:208850
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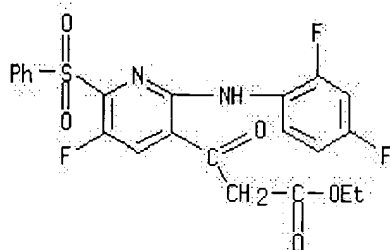
AB Bactericidal naphthyridines I [R = H, F; R1 = H, protective group; R2 = halo, OH, N3, (substituted) alkoxy, alkylthio, arylthio, alkylsulfinyl, arenesulfinyl, alkylsulfonyl, phosphinyloxy, 3-aminopyrrolidino, piperazino, etc.] were prepd. by cyclization of fluoronicotinylacetates II (R3 = protective group) with formamide acetals (R4O)(R5O)CHNR6R7 (III; R4, R5 = alkyl, cycloalkyl; R4R5 = alkylene; R6, R7 = alkyl, NR6R7 = heterocycle). This cyclization was demonstrated using numerous III for prepn. of several I. Thus, II (R = F, R2 = 3-acetylaminopyrrolidino; R3 = Et), which was prepd. in ~6 steps from H2NC6H3F2-2,4, reacted with (MeO)2CHNMe2 to give 88.1% I (R1 = Et). I.2HCl (R = H, F; R1 = H, R2 = 3-aminopyrrolidino) was bactericidal against gram-pos. and gram-neg. bacteria in vitro, with MIC's of ≤ 0.05 -0.2 $\mu\text{g/mL}$.

IT 105152-64-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of)

RN 105152-64-5 HCAPLUS

CN 3-Pyridinepropanoic acid, 2-[(2,4-difluorophenyl)amino]-5-fluoro- β -oxo-6-(phenylsulfonyl)-, ethyl ester (9CI) (CA INDEX NAME)



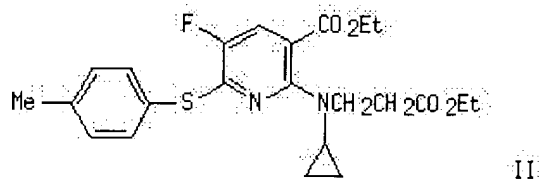
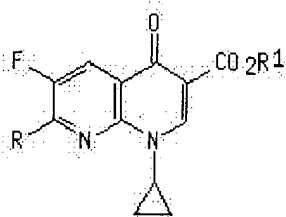
L9 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN

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|--------------|----------------------|
| Full Text | Citing References |
|--------------|----------------------|

ACCESSION NUMBER: 1985:220858 HCAPLUS
 DOCUMENT NUMBER: 102:220858
 TITLE: 1,8-Naphthyridine derivatives
 INVENTOR(S): Matsumoto, Junichi; Nakamura, Shinichi; Miyamoto, Teruyuki; Uno, Hitoshi
 PATENT ASSIGNEE(S): Dainippon Pharmaceutical Co., Ltd. , Japan
 SOURCE: Eur. Pat. Appl., 69 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 132845 | A2 | 19850213 | EP 1984-108822 | 19840725 |
| EP 132845 | A3 | 19850911 | | |
| EP 132845 | B1 | 19880413 | | |
| R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| JP 60028978 | A2 | 19850214 | JP 1983-138000 | 19830727 |
| JP 03073548 | B4 | 19911122 | | |
| JP 60260577 | A2 | 19851223 | JP 1984-117266 | 19840606 |
| JP 05068477 | B4 | 19930929 | | |
| CS 274601 | B2 | 19910915 | CS 1984-5575 | 19840719 |
| AU 8430910 | A1 | 19850131 | AU 1984-30910 | 19840720 |
| AU 565898 | B2 | 19871001 | | |
| US 4649144 | A | 19870310 | US 1984-632853 | 19840720 |
| ZA 8405708 | A | 19850327 | ZA 1984-5708 | 19840724 |
| CA 1327580 | A1 | 19940308 | CA 1984-459527 | 19840724 |
| AT 33494 | E | 19880415 | AT 1984-108822 | 19840725 |
| DK 8403651 | A | 19850128 | DK 1984-3651 | 19840726 |
| DK 160276 | B | 19910218 | | |
| DK 160276 | C | 19910722 | | |
| FI 8402987 | A | 19850128 | FI 1984-2987 | 19840726 |
| FI 77862 | B | 19890131 | | |
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| HU 34976 | O | 19850528 | HU 1984-2875 | 19840726 |
| HU 194561 | B | 19880229 | | |
| DD 228256 | A5 | 19851009 | DD 1984-265685 | 19840726 |
| ES 534624 | A1 | 19851216 | ES 1984-534624 | 19840726 |
| SU 1482527 | A3 | 19890523 | SU 1984-3773894 | 19840726 |
| SU 1442075 | A3 | 19881130 | SU 1985-3884501 | 19850429 |
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| ES 545250 | A1 | 19860516 | ES 1985-545250 | 19850716 |
| PRIORITY APPLN. INFO.: | | | JP 1983-138000 | 19830727 |
| | | | JP 1984-117266 | 19840606 |
| | | | EP 1984-108822 | 19840725 |

OTHER SOURCE(S): CASREACT 102:220858
 GI



AB Naphthyridinecarboxylates I [R = (un)substituted 3-aminopyrrolidino; R1 = H, ester group] were prepd. Thus, I (R = 4-MeC6H4SO2, R1 = Et), prepd. in 7 steps from 2,6-dichloro-5-fluoronicotinonitrile via nicotinate II, was aminated with 3-(acetylaminopyrrolidine to give I [R = 3-(acetylaminopyrrolidino, R1 = Et], which was treated with 10% NaOH at 90-110° for 2 h to give I (R = 3-aminopyrrolidino, R1 = H) (II). II inhibited Streptococcus pneumoniae 1 infections in mice with ED50s of 15.2 mg/kg orally and 8.61 mg/kg, i.v.

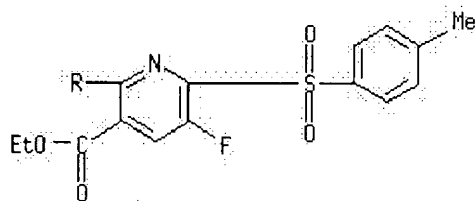
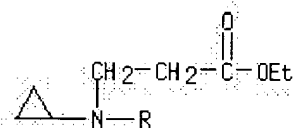
IT **96568-09-1P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and amination of, with pyrrolidine derivs.)

RN 96568-09-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[cyclopropyl(3-ethoxy-3-oxopropyl)amino]-5-fluoro-6-[(4-methylphenyl)sulfonyl]-, ethyl ester (9CI) (CA INDEX NAME)



=> file caold

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| ENTRY | SESSION |
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FULL ESTIMATED COST

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FILE LAST UPDATED: 01 May 1997 (19970501/UP)

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FILE 'REGISTRY' ENTERED AT 19:25:02 ON 01 SEP 2004

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L8 5 S L6 FULL

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L10 0 S L9 AND HARTZ, R?/AU
L11 0 S L9 AND ARVANITIS, A?/AU

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STRUCTURE FILE UPDATES: 31 AUG 2004 HIGHEST RN 736193-62-7
 DICTIONARY FILE UPDATES: 31 AUG 2004 HIGHEST RN 736193-62-7

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

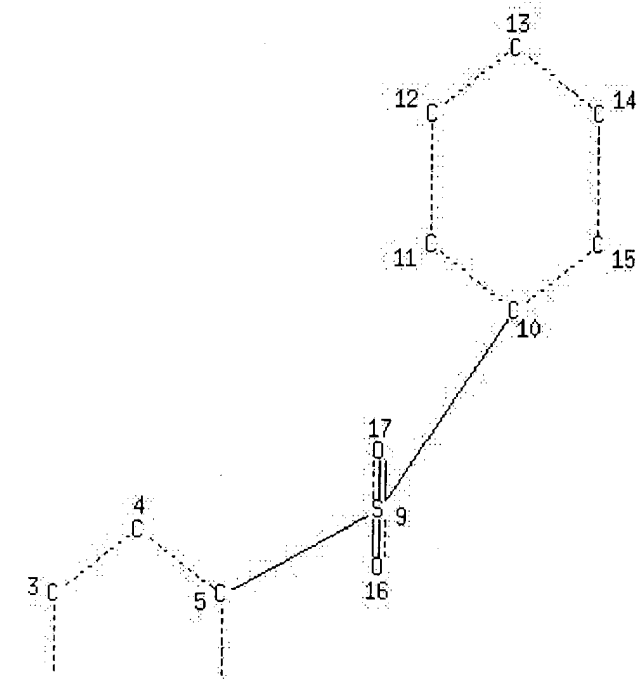
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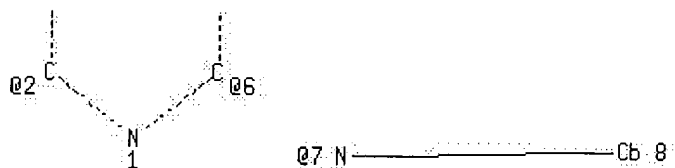
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Page 1-A



Page 2-A

VPA 7-2/6 S

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STEREO ATTRIBUTES: NONE

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0 ANSWERS

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BATCH **COMPLETE**

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DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

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2 ANSWERS

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=> file hcaplus

COST IN U.S. DOLLARS

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TOTAL

ENTRY

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FULL ESTIMATED COST

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FILE COVERS 1907 - 1 Sep 2004 VOL 141 ISS 10
 FILE LAST UPDATED: 31 Aug 2004 (20040831/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L16 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text Citations
 Text References

ACCESSION NUMBER: 2002:888558 HCAPLUS
 DOCUMENT NUMBER: 137:384852
 TITLE: Preparation of 2,5-disubstituted pyridine, pyrimidine, pyridazine and 1,2,4-triazine derivatives for use as p38 inhibitors
 INVENTOR(S): Green, Jeremy; Harbeson, Scott L.; Cochran, John E.
 PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA
 SOURCE: PCT Int. Appl., 78 pp.
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PATENT INFORMATION:

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| WO 2002092087 | A1 | 20021121 | WO 2002-US17673 | 20020510 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2003096817 | A1 | 20030522 | US 2002-144153 | 20020510 |
| EP 1392300 | A1 | 20040303 | EP 2002-752027 | 20020510 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.:

US 2001-290504P

P 20010511

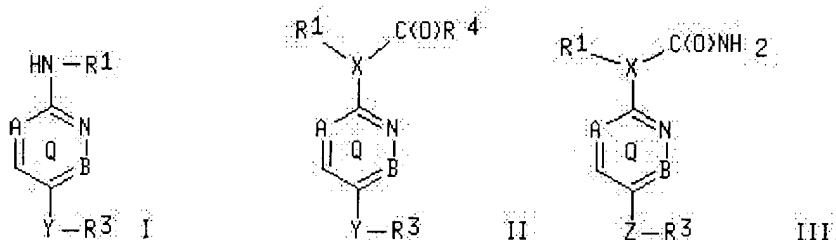
WO 2002-US17673

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OTHER SOURCE(S):

MARPAT 137:384852

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AB The present invention relates to 2,5-disubstituted pyridine, pyrimidine, pyridazine and 1,2,4-triazine derivs. (shown as I, II, and III; e.g. [6-(2,6-difluorophenylamino)pyridin-3-yl]phenylmethanone) as inhibitors of p38, a mammalian protein kinase involved in cell proliferation, cell death and response to extracellular stimuli. The invention also relates to methods for producing these inhibitors. The invention also provides pharmaceutical compns. comprising the inhibitors of the invention and methods of using those compns. in the treatment and prevention of various disorders. In I, II, and III: A is N or CR; B is N or CR; X is N or CH; Y is C(O), CHOH, CH₂, S, S(O), S(O)₂, NH, NR, O or Z; Z is CHOH, -[(C2-C3)-alkyl]-, -S-[(C1-C3)-alkyl]-, -O-[(C1-C3)-alkyl]-, -NH-[(C1-C3)-alkyl]-, -[(C2-C3)-alkenyl]-, -[(C2-C3)-alkynyl]-, -O[(C2-C3)-alkenyl]-, -O[(C2-C3)-alkynyl]-, -S-[(C2-C3)-alkenyl]-, -S[(C2-C3)-alkynyl]-, -NH-[(C2-C3)-alkenyl]-, -NH-[(C2-C3)-alkynyl]-, -[(C1-C3)-alkyl]-S-, -[(C1-C3)-alkyl]-O-, -[(C1-C3)-alkyl]-NH-, -[(C2-C3)-alkenyl]-O-, -[(C2-C3)-alkynyl]-O-, -[(C2-C3)-alkenyl]-S-, -[(C2-C3)-alkynyl]-S-, -[(C2-C3)-alkenyl]-NH- or -[(C2-C3)-alkynyl]-NH-; the C atoms of Q may be optionally substituted with R. R₁ = aryl, heteroaryl, carbocyclyl, heterocyclyl or C1-10 aliph., any of which may be optionally substituted; R₃ = aryl, heteroaryl, carbocyclyl, heterocyclyl, or C1-10 aliph., any of which may be optionally substituted; R₄ = NHR₅, N(R₅)₂, OR₅, C(O)OR₅, -C(O)R₅ or R₆; each R₅ = aryl, heteroaryl, carbocyclyl, heterocyclyl or C1-5 aliph.; R₆ = aryl, heteroaryl, carbocyclyl, heterocyclyl or C1-5 aliph., any of which may be optionally substituted; each R = H, halo or a straight or branched chain C1-C4 alkyl; each of R₁, R₅ and R₆ = optionally substituted with up to 4 substituents, each of which = halo; C1-C3 alkyl optionally substituted with NR'₂, OR', CO₂R' or CONR'₂; O-(C1-C3)-alkyl optionally substituted with NR'₂, OR', CO₂R' or CONR'₂; NR'₂; OCF₃; CF₃; NO₂; CO₂R'; CONR'; SR'; COR'; SO₂NR'₂; SCF₃; CN; NR'C(O)R'; NR'C(O)OR'; NR'C(O)C(O)R'; NR'SO₂R'; OR'; OC(O)R'; OPO₃H₂; or N:CNR'₂. R₃ is optionally substituted with up to 4 substituents, each of which = halo; C1-C3 straight or branched alkyl optionally substituted with NR'₂, OR', CO₂R', SO₂NR'₂, N:CNR'₂, R', or CONR'₂; O-(C1-C3)-alkyl optionally substituted with NR'₂, OR', CO₂R', SO₂NR'₂, N:CNR'₂, R', or CONR'₂; NR'₂; OCF₃; CF₃; NO₂; CONR'₂; R'; OR'; SR'; COR'; C(O)OR'; SO₂NR'₂; SCF₃; N:CNR'₂; or CN; R' = H; (C2-C3)-alkyl; (C2-C3)-alkenyl or alkynyl; a 5-8 membered aryl ring system, a 5-8 membered heteroaryl ring system or a 5-6 membered heterocyclic ring system, any of which may be independently and optionally substituted with 1 to 3 substituents = halo, methoxy, cyano, nitro, amino, hydroxy, Me or Et; provisos are given in the claims. Although the methods of prepn. are not claimed, ~8 example prepn. are included. IC₅₀ or K_i values in μM ranges are given for inhibition of ATPase activity of p38 for 62

claimed compds.; for example, [6-(2,6-difluorophenylamino)pyridin-3-yl]phenylmethanone exhibits IC50 ≤1 μM.

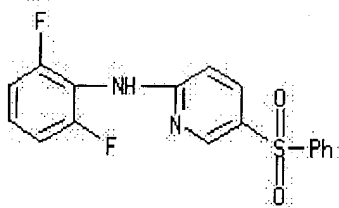
IT **475634-59-4P**, N-(2,6-Difluorophenyl)-5-(phenylsulfonyl)pyridin-2-amine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of 2,5-disubstituted pyridine, pyrimidine, pyridazine and 1,2,4-triazine derivs. for use as p38 inhibitors)

RN **475634-59-4** HCAPLUS

CN 2-Pyridinamine, N-(2,6-difluorophenyl)-5-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



*103(6)2
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REFERENCE COUNT:

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| 7.12 | 508.72 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE ENTRY | TOTAL SESSION |
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L3 1 S L1 FULL

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L4 0 S L3

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L5 0 S L3

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L6 STRUCTURE UPLOADED

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L8 5 S L6 FULL

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L9 4 S L8

L10 0 S L9 AND HARTZ, R?/AU

L11 0 S L9 AND ARVANITIS, A?/AU

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L13 STRUCTURE UPLOADED

L14 0 S L13

L15 2 S L13 FULL

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L16 1 S L15

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